



PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

1652  
IFW**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number

10/575,991

Filing Date

April 13, 2006

First Named Inventor

Lital Alfonta

Group Art Unit

Unassigned

Examiner Name

Unassigned

Attorney Docket Number

54-000711US

**ENCLOSURES (check all that apply)**

- ☐ Fee Transmittal Form  
☐ Fee Attached  
☐ Amendment / Response  
☐ Amendment and Request for Reconsideration  
☐ Affidavits/declaration(s)  
☐ Extension of Time Request  
☒ Receipt Acknowledgement Postcard  
☒ Information Disclosure Statement  
☐ Certified Copy of Priority Document(s)  
☐ Response to Missing Parts/ Incomplete Application  
☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

- ☒ PTO-1449 Form  
☒ Cited References  
☐ Copy of PCT Search Report  
☐ Copy of EP Search Report  
☐ Petition to Convert to a Provisional Application  
☐ Power of Attorney, Revocation Change of Correspondence Address  
☐ Terminal Disclaimer  
☐ Small Entity Statement  
☐ Request for Refund

- ☐ After Allowance Communication to Group  
☐ Appeal Communication to Board of Appeals and Interferences  
☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  
☐ Proprietary Information  
☐ Status Letter  
☐ Additional Enclosure(s) (please identify below):

**Authorization to Charge Deposit Account**

Please charge Deposit Account No. 50-0893 for any additional fees associated with this paper or during the pendency of this application, including any extensions of time for consideration of the documents enclosed.

Remarks

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**Firm  
or  
Individual name

Edward J. DesJardins, Ph.D., Reg. No. 51,162, Quine Intellectual Property Law Group, P.C.

Signature

Date

9.29.06

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below

Typed or printed name

Kimberly Cheung

Signature

Date

October 3, 2006



I hereby certify that this correspondence is being deposited with the United States Postal Service first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450, on October 3, 2006

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.

By

Kimberly Cheung  
Kimberly Cheung

Attorney Docket No. 54-000711US  
Client Ref. No. 1009.1 US / NOV0608P  
Novartis Ref. No. DC/4-33965/SCR

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Lital Alfonta, et al.

Application No.: 10/575,991

Filed: April 13, 2006

For: SITE-SPECIFIC INCORPORATION  
OF REDOX ACTIVE AMINO ACIDS  
INTO PROTEINS

Confirmation No.: Not yet provided

Examiner: Unassigned

Art Unit: Unassigned

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR § 1.97 and  
§ 1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of the references are enclosed. Copies of the cited US Patent applications and US Publications have not been enclosed because they are no longer required by the office for submission. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action on the merits per 37 CFR 1.97(b)(3). However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 50-0893. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Edward J. DesJardins, Ph.D.  
Reg. No. 51,162

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.  
P.O. BOX 458  
Alameda, CA 94501  
(510) 337-7871  
Fax (510) 337-7877

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (use as many sheets as necessary)	Substitute for form 1449A-B/PTO		Complete if Known	
	Application Number	10/575,991		
	Filing Date	April 13, 2006		
	First Named Inventor	Lital Alfonta		
	Group Art Unit	Unassigned		
	Examiner Name	Unassigned		
	Attorney Docket Number	54-000711US		
Date Submitted				

U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number	Kind Code (if known)			
/KG/	1	2003-0082575	A1	Schultz et al.	05-01-2003	
/KG/	2	2003-0108885	A1	Schultz et al.	06-12-2003	

FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				
/KG/	3	WO	2002/085923	A2	The Scripps Research Institute	10-31-2002		
/KG/	4	WO	2002/086075	A2	The Scripps Research Institute	10-31-2002		
/KG/	5	WO	2004/035605	A2	The Scripps Research Institute	04-29-2004		
/KG/	6	WO	2004/035743	A2	The Scripps Research Institute	04-29-2004		
/KG/	7	WO	2004/058946	A2	The Scripps Research Institute	07-15-2004		
/KG/	8	WO	2004/094593	A2	The Scripps Research Institute	11-04-2004		
/KG/	9	WO	2005/003294	A2	The Scripps Research Institute	01-13-2005		
/KG/	10	WO	2005/007624	A2	The Scripps Research Institute	01-27-2005		
/KG/	11	WO	2005/007870	A2	The Scripps Research Institute	01-27-2005		
/KG/	12	WO	2005/019415	A2	The Scripps Research Institute	03-03-2005		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
/KG/	13	CHIN ET AL. (2003) "An Expanded Eukaryotic Genetic Code." <i>Science</i> , 301: 964-967.		

Examiner Signature	/Kagnew Gebreyesus/	Date Considered	03/16/2007
-----------------------	---------------------	--------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (use as many sheets as necessary)	Complete if Known	
	Application Number	10/575,991
	Filing Date	April 13, 2006
	First Named Inventor	Lital Alfonta
	Group Art Unit	Unassigned
	Examiner Name	Unassigned
	Attorney Docket Number	54-000711US
	Date Submitted	

/KG/	14	FENG ET AL. (2003) "Expanding tRNA recognition of a tRNA synthetase by a single amino acid change." <i>Proceedings of the National Academy of Sciences USA</i> , 100(10): 5676-5681.	
	15	FORSTER ET AL. (2003) "Programming peptidomimetic synthetases by translating genetic codes designed <i>de novo</i> ." <i>Proceedings of the National Academy of Sciences USA</i> , 100(11): 6353-6357.	
	16	FRANCKLYN ET AL. (2002) "Aminoacyl-tRNA synthetases: Versatile players in the changing theater of translation." <i>RNA</i> , 8: 1363-1372.	
	17	IBBA (1996) "Strategies for in vitro and in vivo translation with non-natural amino acids." <i>Biotechnology and Genetic Engineering Reviews</i> , 13: 197-216.	
	18	KIGA ET AL. (2002) "An engineered Escherichia coli tyrosyl-tRNA synthetase for site-specific incorporation of an unnatural amino acid into proteins in eukaryotic translation and its application in a wheat germ cell-free system." <i>Proceedings of the National Academy of Sciences USA</i> , 99(15) : 9715-9723.	
	19	KOWAL ET AL. (2001) "Twenty-first aminoacyl-tRNA synthetase-suppressor tRNA pairs for possible use in site-specific incorporation of amino acid analogues into proteins in eukaryotes and in eubacteria." <i>Proceedings of the National Academy of Sciences USA</i> , 98(5): 2268-2273.	
	20	LIU AND SCHULTZ (1999) "Progress toward the evolution of an organism with an expanded genetic code." <i>Proceedings of the National Academy of Sciences USA</i> , 96: 4780-4758.	
	21	OHNO ET AL. (1998) "Co-Expression of Yeast Amber Suppressor tRNA <sup>tyr</sup> and Synthetase in Escherichia coli: Possibility to Expand the Genetic Code." <i>J. Biochem</i> 124(6):1065-1068.	
	22	WANG AND SCHULTZ (2001) "A general approach for the generation of orthogonal tRNAs." <i>Chemistry and Biology</i> , 8: 883-890.	
	23	WANG ET AL. (2000) "A New Functional Suppressor tRNA/Aminoacyl-tRNA Synthetase Pair for the in Vivo Incorporation of Unnatural Amino Acids into Proteins." <i>Journal of the American Chemistry Society</i> , 122: 5010-5011.	
	24	WANG ET AL. (2001) "Expanding the Genetic Code of Escherichia coli." <i>Science</i> , 292: 489-500.	
	25	ZHANG ET AL. (2002) "The Selective Incorporation of Alkenes into Proteins in Escherichia coli." <i>Angewandte Chemie, International Edition</i> , 41: 2840-2842.	
/KG/	26	ZHANG ET AL. (2003) "A New Strategy for the Site-Specific Modification of Proteins in Vivo." <i>Biochemistry</i> , 42: 6735-6746.	

Examiner Signature	/Kagnew Gebreyesus/	Date Considered	03/16/2007
--------------------	---------------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.